

AMENDMENTS

Claims 2-10 are pending.

Claims 6 and 7-8 have been amended.

Claims 9-10 have been added.

Claim 1 has been cancelled.

Support for the amendments is found in the claims and specification (page 4, lines 4-5; pages 23-24; pages 39-40, the bridging paragraph; pages 14-19; page 21, lines 1 and 13; pages 22-23; and claim 1), as originally filed. Specifically, support for claim 6 is found on page 34, line 5 to page 35, line 2; Tables 1-4, and Examples A-D on pages 41-48; pages 14-19; page 21, lines 1 and 13; and pages 22-23.

No new matter is believed to have been added.

REMARKS AND REQUEST FOR RECONSIDERATION

Claims 2 and 6-8 are rejected under 35 U.S.C. 112, first paragraph, for lack of written description because the Examiner is of the opinion that the limitations “(1) (A) > (B)-(i), (2) (A) > (B)-(ii), (3) (A) > (B)-(iii), and (4) (A) > (C)” of claim 6 “lack literal basis in the specification” (see page 3 of the Official Action). The Examiner has alleged that although Tables 2-3 describe specific examples of the claimed hair composition, the specific examples do not reasonably convey that the applicants had possession of the claimed composition at the time of filing (see page 3 of the Official Action).

Although Applicants respectfully disagree, claim 6 has been amended by deleting the limitations (1)-(4).

Thus, it is believed that claim 6 are adequately supported in the original specification. Applicants request that the rejection be withdrawn.

Claims 6-8 are rejected under 35 U.S.C. 103(a) over Yorozu et al., US 5,141,666 and Rau, US 6,121,215.

Claims 2 is rejected under 35 U.S.C. 103(a) over Yorozu et al., Rau, and Nakatsu et al., US 5,965,518.

The rejections are traversed because:

(1) The combination of the references does not describe or suggest a liquid composition having a pH of 1-5.

(2) Diluted in water solid anhydrous products of Yorozu et al. and Rau do not have the claimed amount of ingredients and the pH.

(3) The cited references do not describe or suggest the claimed combination of the compounds (A), (B), and (C).

(4) One would not have used a dry preparation for applying to the hair.

(5) The smell perception from a solid and a fluid preparation is different.

(5) One would not have been motivated to apply the Yorozu et al. and Rue bath preparations to the hair because the goal of Yorozu et al. is to inhibit the quick vaporization of a perfume due to the bubbling of carbon dioxide gas and the goal of Rau is to produce a high level of foam and/or bubbles on the surface of bath water by reacting water with carbonates that produce carbon dioxide gas in the tub water. And

(7) Combining the oil of Nakatsu et al. with the Yorozu et al. and Rau preparations is only possible upon dissolution of the solid form of Yorozu et al. and Rau products in water. However, upon dilution, the content of the components is significantly lower than that of the claimed hair composition.

Conventional hair compositions generally have a pH in the neutral range and contain little acid (page 1 of the present specification). In recent years, hair compositions having a pH in the acidic range (e.g., pH 1-5) to impart various functions have been developed. Acidic

hair compositions can have a peculiar acid smell. When fragrances are simply added to conventional hair compositions, the compositions' odor balance deteriorates. The inventors have found that a combination of a musk with one or more ingredients of a specific chemical structure in particular proportions can mask the acidic smell and that such acidic hair compositions have excellent long-term stability (pages 1-2 of the specification; see also the Examples Tables 2 and 5-15).

Claims 6-8. Yorozu et al. describe a bath preparation comprising (a) 10-80 % of an organic acid comprising about 70 % or more of adipic acid; (b) at least one perfume; (c) a hydrocarbone; (d) an oil, and (e) another perfume or a musk (col. 1-4; Table 1).

However, the Yorozu et al. product is not aqueous and is not hair cosmetic composition. The Yorozu et al. *bath* preparation is formulated into a *tablet, powder or granules* (col. 3, lines 60-67) which forms bubbles of carbon dioxide gas in bath water (col. 1, lines 23-27). Yorozu et al. describe that adipic acid is hardly soluble in water and can be solubilized by a hydrophobic nonionic surfactant such as PEG or sucrose fatty acid ester (col. 2, lines 28-35). Yorozu et al. describe that a 50 g tablet is dissolved 150 liter of water. Yorozu et al. describe that the *high content of adipic acid* allows keeping the perfume smell longer (col. 1-2).

Rau describes a foaming bath product producing a high level of foam at the surface, rather than at the bottom of a tub (col. 4, lines 40-50), comprising a surfactant (1-15 %) which is generally anionic and produces a high level of foam (col. 5). Although Rue describes that adipic acid and other surfactants can be used, the example only disclose using citric acid and anionic surfactants (col. 5-6). Rue describes that the surfactant must be anhydrous or nearly anhydrous (i.e., must comprise no more than about 1 wt.% of water, col. 6, lines 7-13). Dry balls of the Rue foaming product are dissolved in 20 liters of water (col. 7).

More specifically, Yorozu et al. disclose a bath preparation containing a carbonate and an organic acid, which is formulated into a tablet, powders or granules. Rau discloses a ball of a bath preparation containing sodium carbonate and an organic acid. An acid contained in such bath preparations is coated with, for example, polyethylene glycol, to avoid reacting with a carbonate. Once the bath preparation is dissolved in water, a reaction of the acid with the carbonate occurs to generate carbon dioxide gas, as described in Rau. Therefore, the bath preparation is required to be made in a solid state not containing water.

Thus, Yorozu et al. and Rau bath preparations are *solid anhydrous products*, while the claimed hair composition comprises *water* (see the examples in the present specification, page 42 and 46-48).

The pH is a measure of the acidity or basicity of a solution and is defined as the cologarithm of the activity of dissolved hydrogen ions (H^+). The bath preparations of Yorozu et al. and Rue are *anhydrous* and, therefore, do *not* have a pH 1-5 as in the claimed fluid hair composition. Yorozu et al. describe that bathing water is adjusted to a pH about 5 to about 7 when the solid bath preparation is dissolved in water (col. 3, lines 9-11). However, when the Yorozu et al. and Rau dry preparations are dissolved in water, the content of the ingredients is significantly *lower* than that of the claimed hair composition because of the high degree of dilution described by Yorozu et al. and Rau.

Thus, the bath preparations of Yorozu and Rau do not have a pH because both are solid anhydrous products, while the composition of the invention has an acidic pH because it is a liquid product containing water. Therefore, Yorozu et al. and Rau bath preparations to the hair are not suitable for hair cosmetic compositions because they are solid products.

In addition, one would not have been motivated to combine Yorozu et al. and Rau to mask acid smell because the goal of Yorozu et al. is to inhibit the quick vaporization of a

perfume due to the bubbling of carbon dioxide gas and that of Rau is to provide good foaming performance.

Thus, one would not have used a dry preparation for applying to the hair. In addition, the smell perception from a solid and a fluid preparation is different.

Also, one would not have been motivated to apply the Yorozu et al. and Rue bath preparations to the hair because the goal of Yorozu et al. is to inhibit the quick vaporization of a perfume due to the bubbling of carbon dioxide gas and that of Rau is to provide good foaming performance and to produce a high level of foam and/or bubbles on the surface of bath water by reacting water with carbonates that produce carbon dioxide gas in the tub water which is not necessarily good for a hair composition.

Claim 2. Nakatsu et al. describe a fragrance having an antimicrobial activity comprising an oil and non-aromatic terpenoids (abstract). The composition does not comprise water and is an essential oil (Tables 1-4).

Combining the oil of Nakatsu et al. with the Yorozu et al. and Rau preparations is only possible upon dissolution of the solid form of Yorozu et al. and Rau products in water. However, upon dilution (e.g., 50 g in 150 liters in Yorozu et al. and 134 g in 20 liters in Rau), the content of the components is significantly lower than that of the claimed hair composition.

Moreover, Yorozu et al., Nakatsu et al., and Rau do not describe the claimed combination of the compounds (A), (B), and (C).

Thus, Yorozu et al., Rau and Nakatsu et al. do not make the claimed liquid acidic hair composition obvious.

Applicants request that the rejection be withdrawn.

In response to the objection of Claims 7-8, Applicants have amended the claims and it is believed that the claims are clear. Applicants request that the objections be withdrawn.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Marina I. Miller, Ph.D.
Attorney of Record
Registration No. 59,091

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)